



Quality steel from Wetzlar for Edelstahl Rosswag Special gearwheel blanks for high-speed yacht engines

"Steel is where it all starts", to quote the Rosswag company video. This refers to the prime grade steel needed for forged products for extreme requirements, which is what Edelstahl Rosswag specialises in. This largest open-die forge in southern Germany will be celebrating its centenary in four years, and has procured its special steels from Buderus Edelstahl for decades.



Buderus Edelstahl rolled billets in the Rosswag stockyard



Heating the sawn billets to forging temperature



The start of forging in the Rosswag forge



Frank Agel, Billet Sales department manager, visited Edelstahl Rosswag GmbH in Pfinztal in Baden-Württemberg at the end of April, and witnessed the forging of gear-wheel blanks with a really special requirements profile for luxury marine transmissions. Buderus Edelstahl supplies rolled billets to Rosswag (270 square) for this purpose. The rolled billets are then formed and forged at a forging temperature of 850–1100 °C to around 635 mm. Rosswag in turn supplies the gearwheel blanks to ZF Friedrichshafen AG, where they are finish machined. They are finally installed in special marine transmissions for high-powered engines made by Siemens-MTU, which are installed in luxury yachts. "Every self-respecting yacht owner has his eye on a good engine when buying a vessel", says Alexander Essig, CEO of Rosswag. Alexander Essig is a smith by trade, and a graduate industrial engineer, and is an enthusiastic sailor himself. He manages this company – formed in 1911 and now in its fourth generation – jointly with two other family members: Ms Kirsten Walezak, who is responsible for product quality assurance at Rosswag, and Dr Sven Donisi, who has taken over as Production Director in the fifth generation.

Steel made in Wetzlar fabricated and converted by Rosswag is to be found not only in some of the finest and fastest yachts in the world. Rosswag open-die forged products are also to be found in the landing flap gear units of the Airbus 380, in the Ariane space rockets, in Formula 1 bolides, and in the drive units of the ICE 3 high-speed train. And when the bells ring

Dressed gearwheel blank



Christiane Rittel, Billet Sales; Jürgen Ludwig, Rosswag Purchasing; Bruno Hosfeld, Rosswag Quality Assurance; Alexander Essig, Rosswag Chief Executive; Frank Agel, Billet Sales Manager (from left to right)

out in the Frauenkirche in Dresden, in the Strasbourg Minster or in the Stiftskirche in Neustadt, Edelstahl Rosswag is involved. Forging bell clappers is one of the company's traditional activities, and is appreciated even in Malta, where the Peace Bell in the town of La Valetta has a clapper forged in Pfinztal.

Rosswag produces coil, rod, plate and perforated plate to customer specification for a very diverse range of industries, as well as forged special fabrications to order. Typical orders include prototypes and short runs. Approaching 400 different materials are available for the company's customers.

Gearwheel blank being machined



This includes the quality special steels provided by Buderus Edelstahl GmbH. In addition to various working steels, the Rosswag forge also machines titanium, aluminium and other non-ferrous metals. The company currently has a workforce of 130, and sales agents in various European countries.

"It all starts with steel", says Alexander Essig. "Whether a product delivers what it promises depends on its quality and outstanding finish. Only then can you speak of success. We are linked to Buderus Edelstahl by such a success story and by mutual trust that has grown over many decades."

Gearwheel blank for a special marine transmission ready for dispatch

